STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission On Its Own Motion	)	
v.	)	
The Peoples Gas Light and Coke Company	)	Docket No. 10-0716
Citation for alleged violations federal rules incorporated by the Illinois Commerce Commission regarding testing	)	

TESTIMONY IN RESPONSE TO STAFF REPORT
OF
KEITH NAEVE

Q. Please state your name.

A. Keith Naeve.

Q. By whom are you employed?

A. Naeve & Associates, Inc.

Q. What is your business address?

A. 1315 North Sunnyslope Drive, Suite 204, Racine, Wisconsin 53406.

Q. What is your position?

A. Owner and President.

Q. Please describe Naeve & Associates, Inc.

A. I represent and consult with natural gas and propane companies on certain industry-related issues, including compliance with industry

standards. I also represent and consult with manufacturers of natural gas and propane appliances and control valves.

Q. Are you sponsoring any exhibits or schedules to your testimony?

A. Yes, I am sponsoring the following exhibit:

PGL Ex. 3.1 – Curriculum Vitae ("CV").

Q. Is PGL Ex. 3.1 a complete and accurate copy of your CV?

A. Yes.

Q. Please describe your experience with natural gas distribution systems.

A. As Superintendent of Gas Operations and then Manager of Engineering and Operations for Wisconsin Natural Gas Company, I was responsible, among other things, for the construction, installation, operation and servicing of the company’s natural gas distribution system. In these positions, I had broad engineering and operating responsibilities, including pipeline safety. I also had the responsibility to prepare the company's standards for pipeline construction and to prepare the Operations and Maintenance Manual. These documents were developed to ensure that the company operated in compliance with all applicable Codes and Standards. In my role as President of Naeve & Associates, Inc., I have been a consultant to numerous natural gas distribution companies on issues related to the construction, installation, operation and servicing of natural gas facilities. With over 50 years of experience working or consulting on issues relating to natural gas and with my educational and professional background in engineering, I have become familiar with the

Codes and Standards and industry practices governing the construction, installation, operation and servicing of natural gas lines.

Q. Are you familiar with The Peoples Gas Light and Coke Company's ("Peoples Gas") distribution system in Chicago?

A. Yes, I have worked with Peoples Gas and am familiar with its system. Peoples Gas has a low pressure system that operates at approximately one-quarter of a pound of pressure, and a medium pressure system that operates at approximately 22 pounds per square inch ("psi"). The maximum allowable operating pressure ("MAOP") of Peoples Gas' medium pressure system is 25 psi. Peoples Gas' mains and service pipes are made from a variety of materials, including steel, plastic and cast iron. Peoples Gas performs maintenance on its system, replaces pipes and fittings, and improves and upgrades its system.

Q. What is uprating?

A. A pipe system is rated to operate at a certain pressure. Uprating is a procedure to increase the operating pressure of the system or a portion of the system. To uprate a system or portion of a system, however, a natural gas company must perform certain testing to ensure that the pipe being uprated has the integrity to operate under increased pressure. One step that a natural gas company must perform is a pressure test to verify that the pipe being uprated can hold the higher pressure.

Q. Is uprating a common procedure?

A. Yes.

Q. Are you aware whether Peoples Gas has ever uprated any portion of its system?

A. Yes.

Q. Please describe.

A. It is my understanding that Peoples Gas has on occasion uprated its low pressure system to medium pressure. In other words, Peoples Gas has increased the operating pressure of certain parts of its system from one-quarter pound of pressure to 22 psi. Before doing so, however, Peoples Gas has performed pressure testing of the affected portion of the system to make sure that there are no leaks and has the integrity to operate at medium pressure.

Q. When performing uprating, is Peoples Gas required to comply with certain standards?

A. Yes, Peoples Gas must comply with Subpart K of Part 192 of the United States Department of Transportation's ("USDOT") regulations.

Q. Does Subpart K call for pressure testing?

A. Yes.

Q. Describe briefly how a pressure test is performed.

A. A pressure test can be performed by injecting either water or compressed air into an isolated segment of pipe. At the pressure that Peoples Gas operates – 22 psi – it is typical to use compressed air. Peoples Gas would isolate the segment of the system that must be tested by installing caps on each end of the pipe segment. The caps can be installed by welding them

onto the end of the pipe segment or by attaching them mechanically. Compressed air is injected into the pipe at several times the MAOP, and held there for an extended period of time to ensure that the pipe segment can hold the pressure. A recording gauge is used to measure the pressure.

Q. What is blocking or bracing of an end cap?

A. A block or a brace is a device that is used to ensure that an end cap does not separate from the pipe segment during a pressure test.

Q. Are there any requirements in Part 192 to utilize blocking or bracing during a pressure test that is performed as part of an uprating procedure?

A. No.

Q. Does Subpart J of Part 192 apply to pressure tests that are performed in connection with uprating?

A. No, it does not apply.

Q. Why not?

A. Subpart J is expressly limited to test requirements for new segments of pipeline or segments that have been relocated or replaced. It does not apply to uprating an existing segment of pipeline.

Q. Does Section 192.515 require an operator to block or brace a welded end cap during a pressure test that is performed in connection with uprating?

A. No. Section 192.515 is expressly limited to testing performed under Subpart J. It does not apply to testing performed in connection with uprating pursuant to Subpart K. Furthermore, there is no blocking or

bracing requirement contained in Section 192.515, even with regard to pressure tests of new pipelines. Blocking or bracing is not addressed in Section 192.515.

Q. Are there any industry standards or practices with regard to blocking or bracing?

A. There are no specific standards. However, the industry practice is to utilize a block or brace for a mechanical fitting, but it is not common or necessary to utilize a block or brace for a welded fitting.

Q. Why is that the industry practice?

A. A mechanical end cap cannot be relied upon to hold at an elevated pressure and, therefore, it may separate during a pressure test if unrestrained. Thus, a block or brace is typically used to ensure that the end cap will not separate from the pipe during a pressure test. A welded end cap, however, clearly has the integrity to hold at an elevated pressure. Once welded, an end cap becomes a part of the steel pipe. Therefore, it is not necessary to utilize a block or brace. The industry practice is not to block or brace a welded end cap.

Q. If an end cap is welded to the pipe segment, is the industry practice not to utilize blocking or bracing during a pressure test?

A. That is correct. There is no reason to utilize a block or brace during a pressure test if the end cap is welded to the pipe.

Q. Are all of your opinions held to a reasonable degree of scientific and engineering certainty?

A. Yes.

Q. Does this conclude your testimony in response to the Staff Report?

A. Yes, it does.